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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/092,509	03/08/2002	Kevin Clark	0023-0083	3744

44987 7590 09/15/2005

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EXAMINER

SHAH, KAMINI S

ART UNIT	PAPER NUMBER
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2142

DATE MAILED: 09/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/092,509

Applicant(s)

CLARK ET AL.

Examiner

Kamini S. Shah

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8-12, 14-18, 21-23, 25, 26, 29 and 31 is/are rejected.
- 7) ☒ Claim(s) 6, 7, 13, 19, 20, 24, 27, 28 and 30 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 March 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>1/15/05</u> .   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Drawings*

1. Figure 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

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consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-5, 8-12, 14-18, 21-23, 25-26, 29, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boock et al (6,891,845) in view of Lin (6,799,229).

Regarding to claimed invention of claim 1 and 5, Boock discloses a data path configured to: receive data in a data stream (see col. 3, line 10, and temporarily store the data (see abstract for storing in buffer) and a scheduler configured to partition the data into bursts (see col. 3, lines 8-25), i.e. data lanes divided into pairs of single data rate lines), and transmitter logic configured to transmit the current burst (see col. 3, lines 38-40, wherein the output of modules is transmitted to the PMD as in fig 1). Boock teaches the data path configuration as disclosed, and additionally suggest to generate underflow and overflow warning signal if too many banks are empty or when the data are written faster than it can read so that a bank gets written and read at same time (see col. 5, lines 5-26). However Boock does not specify to determine the size of current one of the burst and schedule one or more additional burst in the stream. Lin teaches the burst counter in the MAC interface 16 and counts how many burst for the current packet are in the data FIFO and discloses the control logic which is configured to recover the write pointer as to claimed schedule one or more additional burst in the stream. Therefore, it would have been obvious to one of the ordinary skill in the art at the time of invention to combine the teaching Lin for recovering as can seen as scheduling bursts into the overflow and underflow signal generating

mechanisms of Boock because Lin would provide burst size by counter in the upper bound, see col. 2, lines 44-65.

As per claim 2, Boock discloses the data path includes a plurality of data paths corresponding to a plurality of streams and the scheduler includes a plurality of schedulers corresponding to the data paths (see column 3, Lines 8-25, examiner consider data lanes as plurality of data paths).

As per claim 3, Boock discloses receive bursts from each of the schedulers, and multiplex the bursts to create multiplexed streams (see column 3, Lines 8-25, examiner consider receiving data on four eight bit lanes and then data consolidation inherits creating multiplexed streams).

As per claim 4, Boock discloses the transmitter logic is configured to transmit the multiplexed streams (see column 3, lines 35-40, transmitting).

As per claims 8-12, Lin teaches the counter for determining the number of burst and need for additional burst see col. 3, lines 1-38.

As per claims 14-18, 21-23, 25-26, 29, and 31, claims recite the similar subject matter as claims 1-5 and 8-12, and therefore are rejected for similar reasons. As per claimed switch fabric and plurality of forwarding engines coupled to the switch fabric, Boock discloses Switch and plurality of ports on col. 2, lines 25-35.

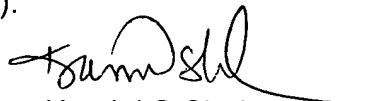
***Allowable Subject Matter***

5. Claims 6-7, 13, 19-20, 24, 27-28, and 30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kamini S. Shah whose telephone number is 571-272-2279. The examiner can normally be reached on IFP.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew B. Caldwell can be reached on 571-272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Kamini S Shah  
Primary Examiner  
Art Unit 2142

kss